National Alliance of Forest Owners

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Sent via electronic mail

Mr. Thomas Carpenter
Designated Federal Officer
Science Advisory Board
Environmental Protection Agency
Mail code 1400R
1200 Pennsylvania Ave. NW
Washington, DC 20460-4164

Re: NAFO Comments on SAB's Draft Report on EPA's 2014 "Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources"

The National Alliance of Forest Owners ("NAFO") thanks the Environmental Protection Agency's ("EPA" or "the Agency") Science Advisory Board ("SAB") for this opportunity to comment on its Draft Report on EPA's 2014 "Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources" (the "Draft Report").

NAFO is a national advocacy organization committed to advancing U.S. federal policies that support the long-term economic, social, and environmental benefits of sustainably managed privately owned forests. NAFO member companies own and manage more than 45 million acres of private working forests to provide a steady and environmentally sustainable supply of timber. NAFO's membership also includes state and national associations representing tens of millions of additional acres.

NAFO seeks common sense policy solutions to sustain the ecological, economic, and social values of forests and to ensure an abundance of healthy and productive forest resources for present and future generations. Approximately 360 million acres—or 70%—of the working forests in the United States are on private land, owned by individuals, families, small and large businesses, and an increasing number of Americans who invest in working forests for retirement. Private U.S. working forests support 2.4 million U.S. jobs, $99 billion in payroll, and $282 billion in sales and manufacturing. These working forests are vital to our nation's natural resource infrastructure, providing forest products, open space, wildlife habitat, clean water and air, recreation, and more. U.S. forest owners are the world's leaders in sustainable forestry.

Individual states administer the world's most effective framework of forestry laws, regulations, and agreements in a way that is carefully tailored to local conditions and needs.

NAFO confines its comments to three topics addressed by SAB in its Draft Report: biogenic CO_2 emission decisions being made in a "policy context"; biogenic assessment factors calculated using forest inventory data at a broad spatial scale; and the reference point baseline as the preferred baseline approach.

I. *Biogenic Carbon Accounting in a Policy Context*

In EPA's 2011 "Accounting Framework for Biogenic CO_2 Emissions from Stationary Sources," the Agency provided SAB with a specific policy context: assessing biogenic CO_2 emissions for Clean Air Act Prevention of Significant Deterioration permitting decisions. EPA removed this policy context in the 2014 Framework, instead asking the SAB to provide policy-neutral guidance on issues related to temporal, spatial, and production scale determination of BAFs.

SAB in this Draft Report recommends to EPA that "future efforts to define specific biogenic accounting factors should be conducted in a policy-specific context, with the objectives and relevant time frame specified." Draft Report at 6. SAB makes this recommendation based on its assertion that "[b]iogenic carbon accounting will vary depending on the policy context, particularly in selection of the time horizon and geographic scope." *Id.*

NAFO appreciates SAB's perspective on making future assessments about biogenic CO_2 emissions based on specific policy objectives. Even though EPA removed the policy contexts in its 2014 Report, the SAB's recommendations give EPA and other policymakers appropriate guidance for future rulemakings on biogenic CO_2 emissions. These recommendations will enable EPA and other policymakers to base their rulemakings on clearly defined policy objectives and use science to inform the most appropriate pathways to achieve those objectives.

Applying this approach greatly simplifies EPA's determination of at least two aspects of a biogenic accounting framework: (1) the particular timescale of a policy objective (Draft Report at 10), and (2) policy impacts on feedstock-specific demand (Draft Report at 18). Regarding the first, EPA will establish the timescale for assessing the policy outcome as a policy objective (e.g., mitigating greenhouse gas emissions by 2025 versus mitigating emissions by 2050, or some other time frame). Since biogenic CO_2 emissions are part of a global carbon system, a determination by EPA to achieve its policy over a long time frame consistent with the natural cycles within that system would be appropriate.

In sum, NAFO agrees with the position that any views on the relationship between policy objectives and accounting methodologies should and will be determined by policymakers.

II. *Calculating Carbon Impacts at a Broad Spatial Scale*

NAFO agrees that calculating carbon impacts using forest inventory data at a broad spatial scale properly reflects the way forests are managed, biomass feedstocks are produced, and geographically overlapping forest product markets operate.

A. Broad Landscape-Level, Rather Than Stand-Level, Approach

NAFO supports SAB's conclusion that when accounting for impacts on carbon stocks, a stand-level or facility-level approach is inappropriate. SAB's recommendation about a broad landscape-level approach best reflects this reality by "expand[ing] the boundaries of analysis to include all effects and recognizes that there is uptake as well as loss of carbon associated with the production of feedstocks concurrently occurring across the landscape. It is the overall balance of losses and credits that determine carbon stock effects." Draft Report at 8-9.

Calculating carbon impacts at the broad landscape level builds on the spatial scale at which forest owners and managers develop and implement their management plans. Forest owners and managers design these plans to produce diverse age classes and a constant supply of harvestable forest product over long timescales. This extended approach results in CO_2 emission and sequestration happening simultaneously, which means that emissions from harvesting are offset on a continuous basis by forest regeneration that is occurring on many other stands that are not being harvested.

The principle of accounting at the landscape level, given the forest management practices employed in the real world, is also supported by scientific research. As research by Olivia Cintas cited in SAB's Draft Report states: "[w]here management activities are coordinated across the whole landscape to obtain a continuous flow of wood for the forest industry, calculating carbon balance at the landscape scale can be more appropriate … Carbon losses in some stands are balanced by carbon gains in other stands, so that across the whole forest landscape the carbon stock follows a trend line that can be increasing or decreasing, or roughly stable over time."[1] And, "[a]ssessment at the landscape scale integrates the effects of all changes in the forest management and harvesting regime that take place in response to—experienced or anticipated—bioenergy demand."[2]

B. Forest Markets Dynamics

The forest practices and their associated carbon impacts are dynamic not only because of the management plans developed and implemented by forest managers, but also because of the global and overlapping markets for forest product streams. As SAB notes, "the net accumulation of forest and soil carbon over time should not be assumed to occur automatically or to be permanent; rather, growth and accumulation should be monitored and evaluated for changes resulting from management, policy, market forces, or natural causes." Draft Report at 9.

[1] Olivia Cintas, et al., "Carbon balances of bioenergy systems using biomass from forests managed with long rotations: bridging the gap between stand and landscape assessments," *Global Change Biology Bioenergy* 1239 (2017) (internal citations omitted).
[2] *Id.*

The broad landscape-level approach best reflects the national and global integration of the forest products industry, including biomass energy producers. Individual producers obtain their supplies from a large and geographically diverse array of forest owners and suppliers; and producers compete with one another in a national, and sometimes global, marketplace. Isolating impacts on a scale smaller than the landscape level is nearly impossible and would lead to a skewed accounting methodology that is not based on real world forest management and marketplace conditions.

III. *Using the Reference Point Baseline and Data as the Preferred Approach to Carbon Measurement*

As NAFO has stated in past comments, consistent with SAB's review of EPA's 2011 Framework, the reference point baseline is the only baseline option that can viably be implemented in a policy or regulatory context. An anticipated future baseline may provide theoretical appeal, but its practical applicability is limited because it is too complex and uncertain.

NAFO's preference for the reference point baseline is consistent with the findings of Thomas Buchholz and his research team, also cited by SAB, which states: "[A]n anticipated future baseline has one major caveat: being a forward-looking tool relying on additional assumptions beyond measurable data points (as applied with a constant reference point baseline), the uncertainty associated with an anticipated future baseline increases over time," and that "[g]iven the challenges in predicting the future status of forest resources, . . . constant reference baselines might be more appropriate for monitoring and regulatory frameworks."[3]

A reference point baseline allows EPA to employ a data-based methodology that can rely on the U.S. Forest Service's Inventory and Analysis ("FIA") program, which is the world's most comprehensive forest data collection and measurement resource. The FIA program relies on actual forest plots to collect data on forestland on a state-by-state basis. Under the Forest and Rangeland Renewable Resources Planning Act of 1974, the Forest Service produces a nationwide assessment every 10 years. However, the annual collection of data would allow monitoring to occur between the 10-year assessments. Using the FIA landscape scale and timeframes mitigates the influences that transitory factors such as the housing cycle, weather, and forest age have on carbon stocks.

[3] Thomas Buchholz, et al., "Uncertainty in Projecting GHG Emissions from Bioenergy," *Nature Climate Change* 4:1045-47 (Nov. 26, 2014).

IV. *Conclusion*

NAFO appreciates this additional opportunity to provide its views on these important issues. We believe that the guidance SAB has provided in this Draft Report is well-supported by comments made throughout the regulatory process, as well as by the numerous scientific studies cited and relied upon by SAB in this document. This guidance provides policymakers at EPA the necessary tools to move forward with policy and regulatory directives in addressing biogenic CO_2.

Thank you for your consideration of these comments. If you have any follow-up questions, please feel free to contact me.

Respectfully submitted,

/s/ William R. Murray

William R. Murray
Vice President for Policy & General Counsel
National Alliance of Forest Owners
122 C Street, NW, Suite 630
Washington, DC 20001
(202) 747-0742
cmurray@nafoalliance.org